

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FORESTRY
NORTHERN REGION

FAIRBANKS AREA

FOREST LAND USE PLAN

Boundary Spruce
NC-1251-F

ADL 416445

March 2011

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I. INTRODUCTION

A. Purpose

The purpose of this Forest Land Use Plan (FLUP) is to provide sufficient information for reviewers to ensure that the best interest of the State will be served by the Department of Natural Resources, Division of Forestry, Fairbanks Area, offering this proposed timber sale. This FLUP deals with site specific considerations of the sale. The boundaries and precise volume of the sale may be refined if and when the sale is developed. Site specific research has been completed on title considerations, land classifications, applicable land management plans, appropriate silvicultural techniques, regulatory and statutory requirements, and physical conditions that apply to the proposed sale area. The proposal is for the harvest of approximately (+/- 30%) 80 acres of land that is predicted to yield approximately (+/- 30%) 135,000 CF of spruce. The sale design may be altered to mitigate potential conflicts. It will be the responsibility of the Forester-In-Charge to ensure that any purchaser of this sale harvests timber per the sale design and sale contract provisions and adheres to Alaska Forest Resources and Practices Act (AFRPA) best management practices.

This FLUP is a revision of the original draft FLUP released in 2008

The public is invited to comment on any aspect of this proposed timber sale with regards to the Preliminary Finding and Decision (AS 38.05.035). Comments should be mailed to the Division of Forestry, 3700 Airport Way, Fairbanks, Alaska 99709 or by email at jeremy.douse@alaska.gov. Comments must be received at the Division of Forestry no later than **February 18th 2011** in order to be considered in the Final Decision of whether the sale will be held in whole or in part. To be eligible to appeal the final decision, a person must have provided written comment by **February 18th 2011**.

B. Five-Year Sale Schedule

The general area and timber type that this proposed sale occupies has been shown as a potential sale area in the current Five-Year Schedule of Timber Sales (FYSTS) for Fiscal Years 2010-2014 as required by AS 38.05.113. It has been listed in previous schedules.

C. Location

The proposed sale is located 60 miles southeast of Fairbanks. Just north of Milepost 295 a winter road exists on the north side of the Richardson highway near Banner Creek. Access to this unit is by using 2.1 miles of existing Banner Creek winter road and constructing an additional 1.8 miles of winter road near Buckeye Creek. The proposed sale area is located within the Section 12 and 13 of Township 7 South, Range 7 East, and Section 18 of Township 7 South, Range 8 E, Fairbanks Meridian. The sale area is shown on the attached map and is within the United States Geological Survey 1:63,360 Quadrangle map titled Big Delta B-5.

D. Title, Classification and Other Active or Pending Interests

The acquisition for the land upon which the sale is proposed is based on General Selection 1131. The title was transferred by Patent 50-84-0151. There are no title restrictions on the area. The primary land classification for the area is Forestry per Classification Order NC-82-065. The proposed sale area is within Unit 7B of the Tanana Valley State Forest (TVSF).

E. General Timber Sale Program Objectives

1. **Develop the State's Renewable Resources.** To follow the DNR's constitutional mandate to encourage the development of the State's renewable resources, making them available for maximum use consistent with the public interest. Sustain and promote a healthy, long-term timber industry in the State, through providing a secure source of timber for harvest that produces raw materials for local manufacturing plants when practical while protecting other resources such as fish and wildlife.
2. **Improve the State's Economy.** To help the State's economy by providing royalties to the State in the form of stumpage receipts, as well as contributions to local economies through wages, purchases, jobs and business.
3. **Improve Forest Health.** To improve forest growth and vigor by harvesting and replacing mature stands and stands with declining vigor with new healthy regenerating stands, while protecting and maintaining other resource values. The actions authorized under this decision will follow the constitutional mandate of sustained yield and shall adhere to multiple use management as described in the TVSF Management Plan.
4. **Improve Wildlife Habitat.** Meet the statutory wildlife management objective for the TVSF (AS 41.17.400(e)) that provides for the production of wildlife for a high level of sustained yield human use through habitat improvement techniques, while allowing for timber management and other beneficial uses of public land and resources.

II. LEGAL AUTHORITY

This Division of Forestry is taking this action under the authority of AS 38.05.035 (e) (Best Interest Finding); AS 38.05.110-120 (Alaska Land Act Statutes); 11 AAC 71 (Timber Sale Statutes and Regulations); AS 41.17.010-.950 and 11 AAC 95 (Forest Resources and Practices Statutes and Regulations).

III. ADMINISTRATIVE RECORD

The case file ADL 416445 and the Tanana Valley State Forest Management Plan constitute the administrative record for this finding.

IV. DISCUSSION OF ISSUES

A. Physical Characteristic of the Sale Area

1. **Topography.** The unit is on a moderately steep south facing slope above a tributary of Buckeye Creek. Elevation range of the site is approximately 1250 to 1550 feet.
2. **Soils.** Soils in the sale area are classified as the Gilmore Series. Gilmore soils are upland silt loam soils that tend to lack a thick surface mat of moss characteristic of close by Ester soils. Rock outcroppings are common in these soils.
3. **Water bodies.** This site is bounded to the south by a tributary of Buckeye creek. The State Department of Environmental Conservation had no comment on this sale during the review of the five year schedule. The sale area presents no obstacles that would prevent implementation of the best management practices of the AFRPA to maintain water quality.
4. **Stand Conditions.** The timber stand and proposed harvest unit consists of Spruce, Birch and Aspen. Merchantable species composition is approximately 10% aspen 5% birch and 85% spruce. Approximate age of spruce is 140 years. The size class consists of pole and saw timber. The moss depth averages 3-4" inches. The grass component is moderate in this stand and is estimated to cover 10% of the area. There

is an estimated 10% defect in the spruce component of the stand. The white spruce component of the stand ≥ 9 " diameter breast height (dbh) comprises approximately 100 trees/acre, an average dbh of 13" and an average height of 78'. Basal area per acre is 70 square feet/acre.

B. Historic and Current Land Use

The historic uses of land in the general area have been logging, hunting, trapping, mining and general trail use. The current uses of the area are mining, recreation, wood cutting, hunting and trapping. The Select Resources Corporation which is a subsidiary of the Tri-Valley Corporation has an active mine in the area (APMA F959334). The most recent logging took place in the area from 1997 to 1999 (NC-855, ADL 415251)

C. Wildlife Habitat

Wildlife typical of the interior are found here and during ground reconnaissance moose sign was observed. No critical wildlife habitat has been identified for this area (TVSF Management Plan), nor has any become apparent during ground reconnaissance.

Treatments proposed for this stand are projected to enhance habitat conditions for ruffed grouse, moose, voles, hares, and ultimately, lynx, marten and fox. In the past, Alaska Department of Fish and Game, Division of Wildlife Conservation have recommended managing for as much diversity as possible when prescribing harvest unit size, shape and position to mimic the results of wildfire or other stand replacement phases such as insect outbreaks or flood events. To accomplish these objectives snags will be retained to provide late-successional wildlife habitat for hole nesting birds, woodpeckers, small mammals, and other species requiring perching habitat. The unit will be laid out with an uneven edge, along and between timber types. This will create varied edge effect beneficial to many wildlife species.

D. Fisheries and Water Quality

1. Best management practices will be implemented to ensure water quality standards in all water courses. During review of the FY 2008-2012 and the 2010-2014 FYSTS, ADF&G Habitat Division did not have particular fish or wildlife concerns with the proposed road or harvest area. There is no expectation that this harvest will have negative impacts on Buckeye Creek, Banner Creek or the Tanana River.

This unit will be harvested during the winter months so damage to surface soil will be minimized. Erosion will be mitigated by backfilling skid trails with debris and through the installation of water bars if necessary.

Road construction will be performed in the winter and light blading will be done so as to produce a smooth running surface. Much of the organic cover will be back bladed or remain in place. Berming of small black spruce trees will not be permitted across water features. Some widening will need to occur on the access road, particularly on the lower sections of the Banner Creek Winter Road (RST 781). The current width of the road is not adequate for a log truck so cutting on the uphill side will be needed. The material will have to be end hauled to a location to be determined. Operations

will be suspended during thaw periods and at the end of winter road use, water bars will be installed if necessary. The Banner Creek access trail will need to be monitored after operations for erosion into Banner Creek. In the event that erosion begins to occur, soil retention structures will need to be put in place.

E. Subsistence

The tract has not been designated as a subsistence zone. The proposed sale of timber is anticipated to have no deleterious effects on subsistence activities. Subsistence activities of fishing, trapping, hunting and gathering of berries and other non timber forest products may occur on State owned lands.

F. Recreation and Tourism

Recreation use of this area is moderate, but not inconsistent with a timber sale. Primarily it consists of hunting and trapping activity, as well as some recreational snowmachining, skiing, hiking, ATV riding and dogmushing. Where trail use utilizes existing winter roads needed for access, sufficient snow cover will be left on the roads to enable continued winter recreational use. Cross trails will be kept free of either snow filled or brush filled berms.

There is some concern from the private landowners in the area that logging will conflict with recreational use. Log trucks will have to move slowly through the lower sections of the Banner Creek trail where most of the blind corners exist. Signs that inform recreational users of ongoing logging and log trucks on the road need to be put in place particularly around the lower sections of the banner creek trail. Most of the logging road systems in the Fairbanks area are also used for winter and summer recreation and the loggers are used to watching out for people on the road.

G. Scenic Resources

The sale is located north of the Tanana River and Richardson highway. It will not be visible from the Richardson Highway. It may be visible from the ridgeline trails, and from some valley bottom winter trails. Leave trees and residuals will somewhat obscure the harvest area and help blend the cut border with existing landscape.

H. Cultural Resources

The TVSF Management Plan does list 8 cultural sites in the same management unit as this proposed harvest. However none are reported within the harvest area. The State Office of History and Archaeology (OHA) do not list any sites on its inventory and had no comment during its review of the FY 2010-2014 FYSTS. During the course of activities associated with this timber sale, cultural and/or paleontological resources may be inadvertently discovered. Should such discovery occur, these sites shall be protected from further disturbance and OHA contacted immediately so that compliance with state laws governing cultural resources may begin.

Under the Alaska Historic Preservation Act (AS 41.35), all burials on state land are protected. If burials or human remains are found, all land altering activities that would disturb the burial or remains shall cease and measures taken to protect it in place. OHA and a law enforcement officer will be notified immediately to ensure that proper procedures for dealing with human remains are followed.

I. Sustained Yield and Allowable Cut

The Alaska Forest Resources and Practices Act (AS 41.17.060 (c)) and Article VIII Sec. 4 of the State Constitution require that the State forest land be managed on a sustained yield basis. Sustained yield is defined in the Alaska Forest Resources and Practices Act (AS 41.17.950(25)):

“Sustained Yield” means the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of forest land and water without significant impairment of the productivity of the land and water, but does not require that timber be harvested in a non-declining yield basis over a rotation period.

The Annual Allowable Cut (AAC) is the amount that can be harvested from forest land managed for forestry purposes in a year under sustained yield management. The AAC in the Fairbanks Area is based on a 120 year rotation age for white spruce timber types and an 80 year rotation age for hardwood timber types as determined by the Alaska Division of Forestry 2010 inventory update. This sale complies with sustained yield/allowable cut principles outlined in the Fairbanks Area Five-Year Schedule of Timber Sales for FY 2010-2014. The AAC for the Fairbanks Management Area is approximately 3,201 acres. The AAC will not be exceeded for this proposed sale.

J. Silvicultural Prescription

1. **Stand Silvics.** The normally merchantable species of trees here are white spruce and birch. Data and research on regeneration and growth characteristics of these species are compiled within the Resource Analysis of the Tanana Valley State Forest (TVSF) Management Plan. The harvest and reforestations systems available in Interior Alaska are also reviewed and listed in the Resource Analysis. The results of the public and agency discussions for harvest and reforestation are discussed in the TVSF Management Plan. Silvicultural harvest systems that facilitate even-aged (natural) management are generally preferred. They mimic the ecological impact of wildfire and other disturbances and result in the greatest increase in site productivity. Even-aged management is normally accomplished through clear cuts, patch cuts and heavy partial cuts (such as seed tree or shelterwood systems), which opens up the site to maximum solar gain. This results in the greatest production of both young hardwood that is important to wildlife and the spruce understory valuable years later as timber. Even-aged management techniques are utilized to provide young, vigorously growing stands in juxtaposition to older, undisturbed stands. Such placement of harvest units can optimize natural seedling and the edge effect. The proposed sale is a heavy partial cut. The birch, aspen and spruce pole timber are to be retained to provide a seed source after harvest has occurred. Opening the canopy will make the site more productive for regeneration.
2. **Specific Management Objectives.** The overall goal for this stand is to increase the productivity and return it to a mixed spruce/aspen stand. This site is comprised primarily of white spruce with a small birch and aspen component. Wildlife values will increase with an increased aspen component. After harvest it is expected that the hardwood component will increase by 15% initially. It is reasonable to assume that

these objectives will be realized under the recommended prescription with some supplemental planting of white spruce if necessary.

3. **Harvest Methods.** The sale will be harvested by a select cut silvicultural system. All spruce 9" or greater will be removed. Snags, birch, aspen and spruce smaller than 9" will not be cut. Residual spruce and birch will be protected from damage during harvest operations. Aspen can be used as bumper trees during harvest. Harvesting will be by the whole tree yarding system. Slash disposal at the landings will be by burning or by salvage for fuelwood use.
4. **Regeneration.** Regeneration of white spruce occurs only from seeds. White spruce trees generally produce some level of seed crop every three to five years and large seed crops every five to seven years. Birch and Aspen can regenerate vegetatively or by seed. Adjacent sites are composed of mixed birch and aspen stands that will provide seed to this unit. A regeneration survey will be conducted three years after the harvest. If the survey indicates inadequately stocked areas greater than ½ acre and totaling 10 acres than hand plating of white spruce seedlings will be performed on non-stocked areas. The goal for regeneration is to achieve a minimum of 450 evenly distributed trees per acre.

K. Transportation

The planned access to the proposed sale is by winter road starting on the north side of the Richardson Highway near mile 295 where there is an old road that parallels Banner Creek. The proposed access is to travel up the Banner Creek road through a mining claim and then construct 1.8 miles of winter road to gain access to the western portion of the sale.

Stutzmann Engineering Associates of Fairbanks completed a survey of this road (Fairbanks 98-37) in 1998 for the Tri-Valley Corporation who has mining interests in the Banner Creek area. There continues to be active mines in the Banner Creek and Buckeye Creek drainages run by a subsidiary of the Tri-Valley Corporation. However, the official access to these mining operations is by the "Ridge Trail" (AKA Tenderfoot Road) from the east of the mine site and not on the Banner Creek Road. There is also an active mine to the east of the Banner Creek Road called the Campbell Mine.

The Banner Creek Road is an RS-2477 right-of-way officially named the Richardson Telegraph Station-Ridge (RST 781). The Banner Creek Road was historically used to reach mining areas in the Tenderfoot and Salcha region. The route is included in the 1973 Department of Transportation and Public Facilities trail inventory (map #101) as trail #134a. From 1997 to 1999 this road was used to gain access to timber sale NC-855-F (ADL 415251).

Originally NC-1251 was proposed for the 2009 timber sale auction but the local residence voiced concern with the use of Banner Creek Road as the proposed access. The sale was postponed until forestry could further evaluate these issues. The general concerns from the 2008-2012 FYSTS public review were:

- 1) Logging traffic would be a conflict with the recreational use of the road and could pose safety issues

- 2) It would be difficult to protect the Banner Creek survey centerline metal caps from damage as a result of logging traffic
- 3) Protecting private property that the 60' easement goes through will be too difficult
- 4) The Tenderfoot road is a much safer alternative than the Banner Creek Trail
- 5) Road improvements would be required before the road would be adequate for logging trucks

In the spring of 2009, Forestry personnel inspected the Tenderfoot Road and three trails as alternatives to the Banner Creek Road for access to the timber sale (see figure 1). The Tenderfoot Road does not itself access the timber sale so one of three trail system would need to be upgraded to be used for the timber sale. Two of the three trails were evaluated for winter access and one was evaluated for all season access.

Tenderfoot Road:

The Tenderfoot Road is in good condition and would support the log truck and support vehicle traffic associated with a timber sale. It is currently used to access The Campbell mine and is the recorded access to the Evelyn mine, however, there appears to be no current activity on the Evelyn mine. The primary concern with this access is where the Tenderfoot road terminates at the Richardson Highway. There is a blind corner just to the east of the intersection which would pose a safety risk when log trucks enter traffic. This hazard would be very high during the winter months when roads are slick and stopping quickly is difficult.

Alternative 1:

This alternate route was evaluated as one of the winter access trails. The trail terminates at the Banner Creek Road within the Evelyn Mine. The trail is a snowmachine trail but it appears it was used at one time to get mining equipment into the area. It is a wide swath of removed timber resembling a utility easement. This trail is far too steep for a log truck to travel on. The Tanana Valley State Forest (TVSF) Management Plan lays out the northern region forest road standards and a 10% adverse grade is the limit for a secondary winter road. This trail is generally 16% slope with undulations that exceed 20%.

Alternative 2:

This trail passes the Campbell mine and drops down to the north side of the Evelyn Mine where it intersects with the Banner Creek Road. This is the recorded access to the Evelyn and Campbell mines. This trail was evaluated as a winter trail because it would utilize portions of the Banner Creek trail to access the sale. This trail is in good condition to the Campbell mine, assumedly because of the equipment used to operate the mine and the fact that the trail stays on top of the ridge. Once it passes the mine area it quickly degrades. The trail drops into an incised gully that is steeper than the limits outlined in the TVSF management plan for secondary winter road. This gully also funnels moisture into it from the surrounding area creating an

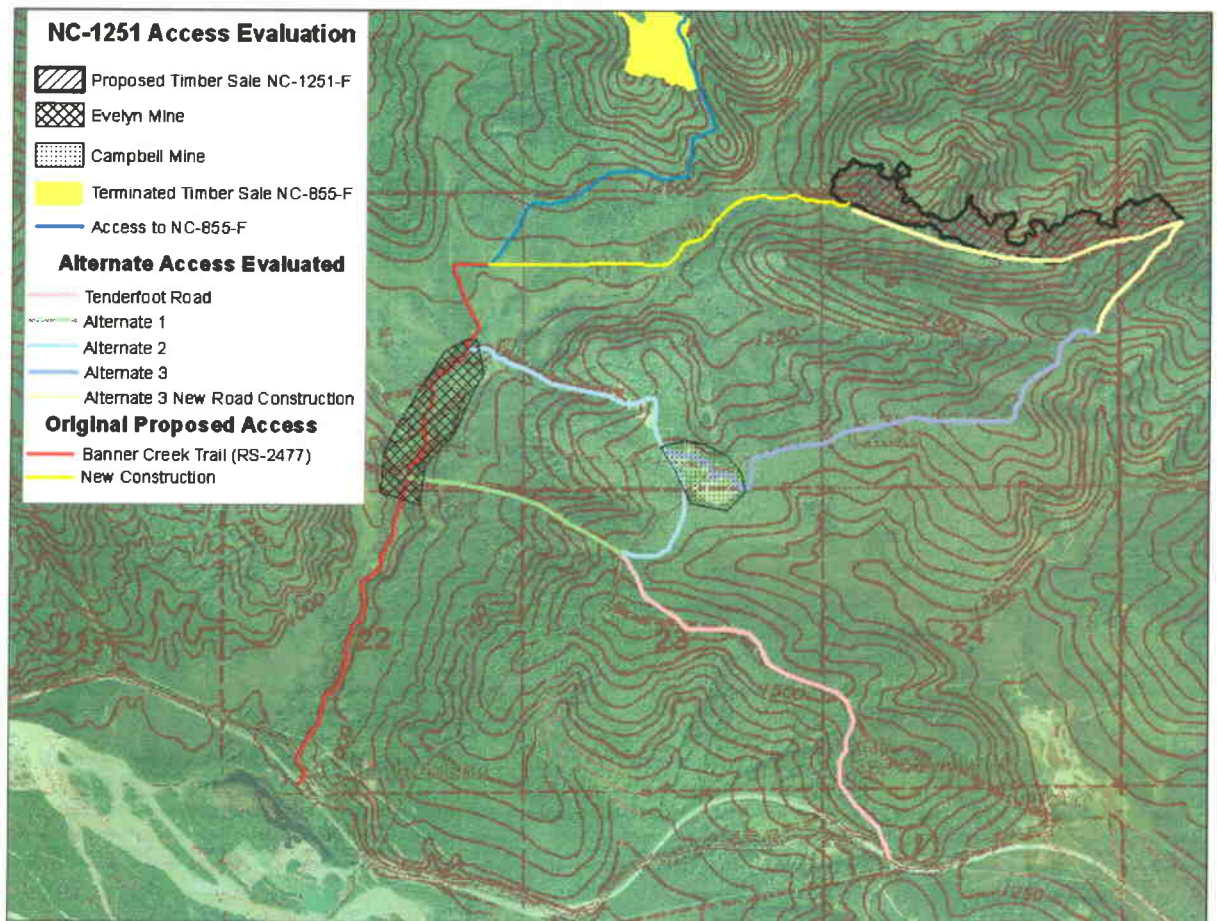


Figure 1: Map of alternatives evaluated for access to NC-1251.

abundance of overflow ice on the tread of the trail. This overflow forms up on a steep section of the trail that would make it too difficult for log trucks to negotiate.

Upon consulting with the Mining section of the Division of Mining, Lands and Water about the Campbell and Evelyn mines, I was informed that the Evelyn mine is in an active status but has not seen any activity in recent history. Also upon questioning the slope angle of this trail to access the mine, mining personnel informed me that mining operations tend to use different types of equipment such as tracked vehicles that can negotiate steeper slope angles.

Alternative 3:

This alternative was evaluated as an all season road which is beneficial in terms of gaining access to ground where harvest operations are not limited to 4-5 winter months. This trail passes through the Campbell mine and follows an ATV trail approximately 2 miles. To gain access to the proposed sale a new road would need to be constructed from the existing ATV trail through a moderately sloped northwest facing birch stand. Full bench road construction and end hauling would need to occur. In order to keep the proposed road under the 10% adverse grade limit, the road

would have to pass through a steep section of north facing black spruce and then pass over a deeply incised drainage bottom to get to the proposed sale (see figure 2). Given the form of the trees on this site it is likely to have shallow permafrost and disturbing the organic layer will do substantial damage to the area. It would be too difficult to maintain an all season road here and could open the state up to potential liability. Also crossing Buckeye Creek would require bridging material that would span an area over 100' in distance.



Figure 2: An incised drainage at buckeye creek and a north facing stand of stunted black spruce. This is difficult ground to put a road in and would require a lot of maintenance.

The best option in terms of safety, economics, historic use and operability is to utilize the existing Banner Creek Road and construct the 1.8 miles of new winter road. The Banner Creek Road terminates at a pull off of the Richardson Highway. Also where trucks would be entering traffic the highway is straight so oncoming traffic would be able to see log trucks entering and exiting the highway well in advance. This road is going to require some widening in sections but not as much as would be required for any of the 3 alternatives. This road will pass over some areas with overflow but these sections are on flat sections of the road and easily negotiated with the use of tire chains. Half of the distance of the new winter road construction would actually be reopening old mining access roads. Overall this access route is a gentle favorable grade where empty log trucks drive up to the sale and loaded trucks drive down. Most of this route was used for a previous timber sale where the operator had no issues with the access. Also by maintaining winter road infrastructure in the valley bottom, the state is creating possibilities for future sales further up valley. It is preferable for access roads to reach proposed sales at the bottom of the sale. This avoids an uphill skid which can be difficult to accomplish. Keeping roads in the valley bottom also prevents loaded vehicles from climbing up hills and then descend the same amount of elevation.

All of the concerns of the residents that live in the area can be mitigated.

- 1) There will be minimal conflict with recreational users. The general practice of maintaining winter roads is to drag the road so the snow is compacted and can be used as the road base. The road would only be plowed when there is significant snowfall. Snowmachines, dog mushers, walkers and skiers will be able to continue their use of this road. Trails crossing this road will not be bermed or blocked. Log truck drivers will need to drive slowly through this section knowing

that people may be on the road. This is standard on all of the logging roads in the Fairbanks area.

- 2) This sale will not be plowed unless there is significant snowfall. Dragging a winter road is a more common practice. The metal caps for the survey should not be damaged because they will be buried by snow.
- 3) There are only a few spots where widening will be required. The edges of the ROW in those sections will be flagged to avoid any damage on private land.
- 4) The Tenderfoot Road is not a safer alternative than the Banner Creek Road because of the blind corner to the east of where it intersects with the Richardson highway. Oncoming traffic could collide with log trucks particularly in winter months when the road can be slick.
- 5) It is true that some road improvements would be required before the road could be used. It is forestry's intent to utilize this access for future timber sales. It is the only feasible access to approximately 26,000 acres of state forest. Investing in this access and hardening it so it can be used for future sales is the ultimate goal.



Figure 3: The full bench cut on the first mile of the Banner Creek Road. Some work is required to widen sections of the road

Given the considerations of safety, environmental degradation, historic use and future planned use, the Banner Creek Road is the access that is the most sustainable. All 3.8 miles of winter road will be maintained throughout the harvest operation to the secondary winter road standards set out in the AFRPA and the TVSF management plan.

L. Erosion

There are two soil erosion concerns: surface erosion and mass wasting of soil and debris. Road construction and poor maintenance of roads primarily causes surface erosion. To avoid erosion, debris will be placed back onto skid trails and water bars installed if necessary. Harvesting will be suspended during periods of thawing soil conditions to assure there is minimal soil disturbance. The location of skid trails will optimize skidding distances and provide for adequate landing areas. The other aspect of erosion (mass wasting and debris avalanches) normally occurs on slopes of more than 70 percent. In the area of the proposed timber sale slopes do not reach this grade.

Improvements to the first mile of the Banner Creek Road will have to occur in the early winter months. Proper drainage ditches, outsloping, and grading will need to occur. Once logging operations have ceased, forestry personnel will have to monitor the trail for erosion. In the event that the road is eroding into Banner Creek, soil stabilizing structures must be placed on the damaged sites.

M. Mining

This sub-unit of the TVSF has historically seen moderate levels of mining activity, however, there are no current mining claims within the sale area. More detailed information on subsurface resource use is found in the TVSF Management Plan. Other than providing access, and sharing some of the same access roads, this sale will have no impact on the potential mining resources or mining activity in this area.

N. Materials

No rock materials will be required for the construction of access roads.

O. Economics

In addition to generating royalties to the State's general fund, the proposed sale will create economic benefits to the Fairbanks North Star Borough and to other locations in Alaska. The Borough business community will receive direct economic benefits from providing support services for the operators through sales of fuel, food, housing, medical and miscellaneous supplies. The residents of the Borough will receive an indirect benefit through taxes paid to cities and the Borough by the operator and employees during the course of the timber harvest operation.

The sale is expected to benefit the local economy by providing jobs. It will have a positive impact on local employment by generating numerous man-hours of work associated with the harvest and transportation of wood products from this sale. Additionally the public may benefit from access to additional personal use fuelwood areas. Another benefit would be increased wildfire protection for Harding Lake homeowners through the potential of utilizing the winter road as a holding line during suppression efforts.

V. MARKET CONDITIONS

Interior Alaska has a growing demand for biomass and firewood and a sustainable market for saw timber. Heating oil continues to be more costly in the interior than the national average therefore residents are looking for an alternative and the only affordable one is wood. Local businesses are currently producing wood pellets as an alternative to traditional firewood. This market addresses an ongoing air quality issue in the Fairbanks area because these manufactured pellets produce almost no emissions. As this market continues to grow, the demand for material will increase. Other businesses are also looking into the use of biomass as a feedstock for producing electricity and heating alternatives in rural Alaska.

With improvements in wood stove technology for reducing emissions, firewood is also a viable alternative to high cost heating oil. The demand for firewood has steadily increased in the past few years and will likely continue to increase. Local suppliers of firewood continue to have a demand for accessible timber sales to deliver their product.

Residential construction and commercial operations throughout Alaska still need sawn products to support their operations. Local businesses that produce these products continue to pay for the delivered material. This sale is expected to contain timber well suited for lumber production or house logs.

These three markets create jobs in the forest products industry. Loggers, log truck drivers, commercial firewood cutters and mill workers all benefit from a sustainable timber market. This sale will provide the material needed to sustain these industries. As the economy continues to rebound there will be more demand for the products that this sector of the labor force provides.

VI. ALTERNATIVE ACTIONS

There are four possible alternatives to consider for this sale. A discussion of each of the four alternatives follows:

1. To continue the sale(s) as proposed.

This alternative meets the objectives of the Five-Year Schedule of Timber Sales and DNR'S constitutional mandate. It also meets the silvicultural objective of improving forest vigor, provides for a value-added end product and creates additional jobs in Alaska due to the combination of road building, logging, and trucking. This alternative also complies with the management objectives of the TVSF Management Plan for Unit 7B.

2. To modify the sale(s) by making them smaller or larger.

The proposed sale unit is a logical setting for typical commercial logging equipment in Interior Alaska. The size of the sale is designed to be large enough to be economically viable considering access development and mobilization costs and distance to processing facilities. Sales of this size are appropriately balanced to maintain other resource values as well as provide economic benefits to the Tanana Valley.

3. Defer the sale of this timber to a later date.

Deferring harvest to a later date would fail to meet many of the objectives of the sale program. One of the main objectives is to make State-owned timber consistently available to the timber industry.

4. **Do not offer this timber for sale.**

This alternative would result in not meeting any of the objectives outlined for this management action. Utilization of the forest resource would not be achieved. There would be no significant contribution to the State and local economies. This alternative would delay the management objectives planned for the area, deny making a source of raw materials available to the local wood products industry, and would delay the harvest of mature trees, prior to the onset of disease or insect infestation. Decay and infestation of saw timber spruce results in the loss of economic value.

VII. FINAL FINDING AND DECISION

**DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FORESTRY
BEST INTEREST FINDING
NC-1251-F, "Boundary Spruce"**

I. Formal review and response to objections, comments, or alternatives (summarized):

The Agency and Public review of the Forest Land Use Plan (FLUP) started on January 14, 2011 and ended on February 18, 2011. Advertisement was published in the Fairbanks Daily News-Miner on January 16, 2011 and January 23, 2011. The FLUP review advertisement was posted on the Department of Natural Resources, Division of Forestry web site on January 14, 2011. In addition, 148 requests for comments were either e-mailed or sent to various agencies, organizations and members of the public.

The Alaska DEC, Division of Water had no specific concerns for this sale. The ADF&G, Division of Habitat had no specific concerns for this sale but made a general comment that steep slopes in some areas indicate that special care will be needed during road construction and maintenance to prevent erosion. No divisions within DNR had any comments on this sale.

One resident that lives adjacent to the Banner Creek trail made many comments regarding the access route for this timber sale. The concerns that were addressed in the transportation section of this FLUP also still apply. New concerns that were addressed by this resident are included in the following as is the states responses to those issues.

- 1) To protect private property owners land and the easement itself, a survey should be completed that marks the boundaries of the easement. That way if the centerline survey markers get damaged, the edges will delineate the easement and identify the private property.

- a. The state agrees with this comment, a survey of the RS-2477 that delineates the edges of the easement will be accomplished before any improvements of the trail begin.
- 2) Clearing up access issues now is in the states best interest if this is going to be a primary access to this management unit of the Tanana Valley State Forest.
 - a. The state agrees with this comment. It is the states intent to use this easement to access future timber sales so it is in the states best interest to guarantee public access though a survey and to harden the site so it is sustainable and can be used for many years.
- 3) There are two metal culverts on this trail that are exposed and could be further damaged by heavy trucks and equipment as there is no protective material covering them to help support them from collapse.
 - a. If the culverts are perched or are pushing up out of the ground, they are probably not functional anymore. The state will assess the current condition of these culverts to identify if they need being replaced or if they're even needed for proper drainage. This access will only be used by logging equipment in the winter months when there is adequate snow covering the surface of the road.
- 4) Widening sections of the road will need to occur early enough in the winter so that the ground has not frozen so deeply as to make it difficult to remove the cut bank and leveling the trail
 - a. The state agrees with this comment. Widening of this road will need to take place early enough in the winter season so that the ground is not completely frozen but late enough to minimize damage to the road.
- 5) Erosion control will need to take place. Cutting the inside bank to widen the road may speed up erosion by removing grass and roots that have established.
 - a. The state agrees with this comment. There is one section in particular on a tight curved full bench cut where erosion control measures will need to take place on the downhill side of the road.
- 6) The section of trail where Buckeye Creek and Banner Creek intersect is a concern for erosion. The Concern is if the cut banks of Buckeye Creek need to be modified or if the drainage is filled with snow and ice than the flow of the creek may change. This could ruin the trail for summer time use.
 - a. The intersection of Buckeye Creek and Banner Creek is an active mine. Logging operations and road construction would not have any more impact to the drainages than what occurs in mining operations. Cut banks within the stream will not be altered. If snow or ice was needed to get across the creek, than the logger will if possible remove or at least trench the ice dam at the end of the season to allow for natural flow.
- 7) Trail safety and noise late at night continue to be a concern.
 - a. As was addressed in the transportation section of this FLUP, traffic concerns are an issue on most of the Fairbanks area logging roads. Loggers understand that they need to drive carefully through sections with blind corners. A sign will be erected that informs users that this road is used as a winter logging road and to be careful during winter months.

- b. Logging doesn't tend to occur at night. In other areas where log trucks pass through residential areas, the Division of Forestry has not received any complaints regarding noise issues at night.
- 8) Trails that cross the Banner Creek trail need to be kept open and berms created by plowing or dragging should be knocked down so that those trails can be negotiated by recreational users.
 - a. The state agrees with this comment. This is standard practice on all winter logging roads.

II. Final Finding and Decision:

The purpose of this decision is to determine if the Department of Natural Resources, Division of Forestry, shall make available approximately 80 acres of spruce sawtimber and located in Sections 12 and 13, Township 7 South, Range 7 East and Section 18 Township 7 South, Range 8 East, Fairbanks Meridian, Alaska.

1. The sale meets the objectives of the Five-Year Schedule of Timber Sales and DNR'S constitutional mandate.
2. The sale meets the silvicultural objective of improving forest vigor, provides for a value-added end product and creates additional jobs in Alaska due to the combination of road building, logging, and trucking.
3. The sale complies with the management objectives of the TVSF Management Plan for Unit 7B, which allows for commercial and personal use timber production while managing for dispersed and developed recreation.
4. Sale layout and design adhere with Region-III Riparian Standards. This sale is consistent with all statutes and plans.
5. The sale has undergone agency and public review and concerns have been resolved in the preparation, documentation and design of the sale.

The finding presented above has been reviewed and considered. The case file has been found to be complete. The requirements of all applicable statutes have been satisfied. Therefore, it is the finding of the Director that it is **in the best interest of the state** to approve this action under the authority of AS 38.05.035(e) and AS 38.05.110-120.

A person affected by this decision who provided timely written comment may appeal it, in accordance with 11 AAC 02. Any appeal must be received by April 29, 2011, and may be mailed or delivered to Dan Sullivan, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. If no appeal is filed by that date, this decision goes into effect as a final order and decision on April 29, 2011. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources. It is the Division of Forestry's intent to offer this timber sale by auction on or after May 2, 2011. If no qualified bid is received within the time specified during the auction,

the Division of Forestry may offer the sale for purchase over-the-counter without re-advertisement for not less than the advertised minimum bid.

Prepared and Recommended by: Jeremy Douse, Resource Management Forester

Concur (X)

Do Not Concur ()



Kathryn Pyne

Fairbanks Area Forester

March 17, 2011

(Date)